District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-101
May 27, 2004

Submit to appropriate District Office

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

[1] Operator Name and Address	[2] OGRID Number
McElvain Oil & Gas properties, Inc. 1050 17th Street, Suite 1800 Denver, CO 80265-1801	22044
	[3] API Number 30 - 039- 29720

[3] Property Code	[5] Property Name	[6] Well No.
25588	Bear Com 29	2

[9] Proposed Pool 1	[10] Proposed Pool 2
Blanco Mesa Verde	

[7] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	29	26N	2W		1145	North	805	East	Rio Arriba

[8] Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Additional Well Information

[11] Work Type Code	[12] Well Type Code	[13] Cable/Rotary	[14] Lease Type Code	[15] Ground Level Elevation
N	G	R	P	7394'
[16] Multiple	**[17] Proposed Depth**	**[18] Formation**	**[19] Contractor**	**[20] Spud Date**
N	6281'	Mancos	D&J Drilling	December 30, 2005

Depth to Groundwater > 100 ft | Distance from nearest fresh water well > 1000 ft | Distance from nearest surface water 700 ft

Pit: Liner: Synthetic X 12 mils thick Clay ☐ Pit Volume: 6400 bbls Drilling Method: Mud/Air

Closed-Loop System ☐ Fresh Water X Brine ☐ Diesel/Oil-based ☐ Gas/Air X

[21] Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12.250"	9.625"	36	600'	320	Surface
8.750"	7.000"	20	4181'	265	2090'
		DV tool @	2090	245	Surface
6.250"	4.500"	10.5	4061-6281'	230	4061'

[22] Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

Spud in San Jose formation. Drill surface hole to 600 feet using fresh water mud. Run and cement surface casing with cement returns to surface. WOC 12 hours. Install BOPE. Pressure test to minimum of 600 psi for 15 minutes. Drill intermediate hole to 4181 feet using fresh water mud.. Run and cement intermediate casing in two stages with cement returns t surface. WOC 12 hours. Pressure test BOPE to 1500 psi for 15 minutes. Drill production hole to TD in Mancos formation using air hammer. Log well. Run and cement production liner with cement returns to liner top. Move out drilling equipment. Move in completion equipment. Run cased hole correlation logs. Pressure test intermediate casing and production liner to 3500 psi for 30 minutes. Perforate select Mesa Verde intervals and stimulate with 2% KCl base fluid. Clean up and test well. Install surface production equipment. Place well on production.

DEC 2005
RECEIVED
OIL CONS. DIV.
DIST. 3

[23] I hereby certify that the information given above is true and complete to the best of my knowledge and belief. **I further certify that the drilling pit will be constructed according to NMOCD guidelines X, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.**

Printed name: Robert E. Fielder

Title: Agent

E-mail Address: pmci@acs-online.net

Date: December 7, 2005 | Phone: 505.632.3869

OIL CONSERVATION DIVISION

Approved by:

Title: DEPUTY OIL & GAS INSPECTOR, DIST. #3

Approval Date: DEC 07 2005 | Expiration Date: DEC 07 2006

Conditions of Approval Attached ☐

District I
PO Box 1980, Hobbs, NM 88241-1980

District II
PO Drawer DD, Artesia, NM 88211-0719

District III
1000 Rio Brazos Rd., Aztec, NM 87410

District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-039-29720	72319	Blanco Mesa Verde

[4] Property Code	[5] Property Name	[6] Well Number
25588	BEAR COM 29	2

[7] OGRID No.	[8] Operator Name	[9] Elevation
22044	McELVAIN OIL & GAS PROPERTIES	7394'

[10] Surface Location

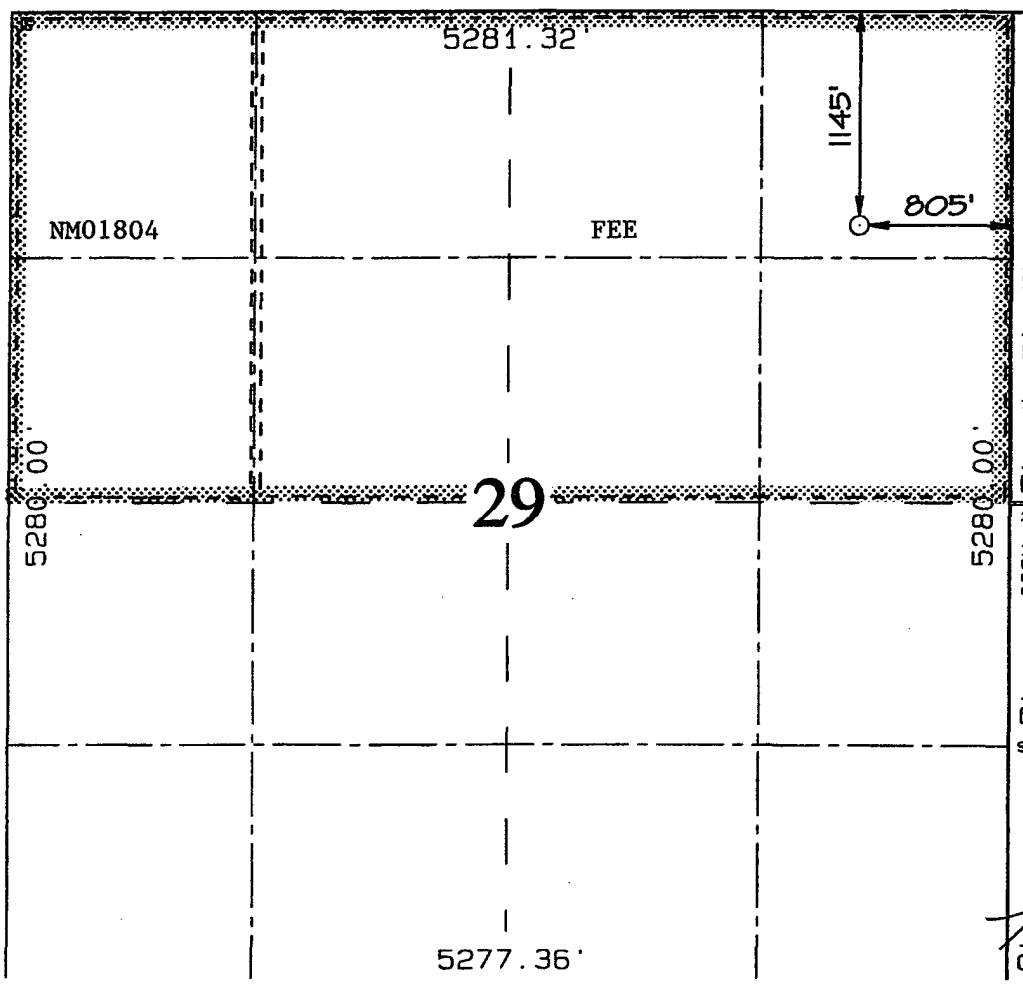
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	29	26N	2W		1145	NORTH	805	EAST	RIO ARRIBA

[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
N/2 - 320.0 acs	Y	C	

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



[17] OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

Signature

Robert E. Fielder

Printed Name

Agent

Title

December 7, 2005

Date

[18] SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

JANUARY 4, 2001

Date of Survey

Signature and Seal of Professional Surveyor

NEALE C. EDWARDS
NEW MEXICO
6857
REGISTERED PROFESSIONAL SURVEYOR

Certificate Number 6857

McElvain Oil & Gas Properties, Inc.
Bear Com 29 No. 2
1145' FNL & 805' FEL
Section 29, T26N, R2W, NMPM
Rio Arriba County, New Mexico

TEN POINT DRILLING PROGRAM

1. **Surface Formation:** San Jose

2. **Surface Elevation:** 7394' GL

3. **Estimated Formation Tops:**

Formation	Top - feet	Expected Production
Nacimiento	1876	
Ojo Alamo	3441	
Fruitland	3641	
Pictured Cliffs	3741	GAS
Lewis	3981	
Intermediate TD	4181	
Huerfanito	4241	
Chacra	4741	
Cliff House	5531	GAS
Menefee	5591	GAS
Pt. Lookout	5906	GAS
Upper Mancos	6131	
TOTAL DEPTH	6281	

4. **Surface Hole Program:**

Bit: Drill a 12 1/4" hole to 600' using a retip mill tooth, IADC Class 115 or 116, bit. WOB: all. RPM: 70 - 100.
Mud: Use a fresh water base spud mud with the following properties:

Interval (ft)	Weight (ppg)	Ph	Vis(sec/qt)	Water Loss
0 - 500	8.6 or less	9.0-9.5	40 - 50	No Control

Casing and Cementing: A string of 9⅝" 36# J-55 or K-55 ST&C casing will be set and cemented to the surface in a single stage with 320 sacks (377.6 cf) of Class "B" cement (yield = 1.18 cf/sk) containing 3% $CaCl_2$ and 1/4 lb/sack celloflake. Slurry volume assumes 100% excess over calculated hole volume. If cement does not circulate to surface, cement will be topped off using 1" pipe down the 12 1/4" by 9 5/8" annulus. Minimum clearance between couplings and hole is 0.8125". Prior to drilling out the shoe, casing and BOPE will be tested to a minimum of 600 psig. Safety factors utilized in the design of this casing string were: burst = 1.1; collapse = 1.125; and tension = 1.8.

WOC 12 HOURS. Nipple up 11" 2000# BOPE. Pressure test surface casing and BOPE to 600 psi for 15 minutes.

Centralizers: Run four (4) 9⅝" X 12 ¼" regular bowspring centralizers. Install first one on stop ring in middle of shoe joint.

4. **Surface Hole Program** - continued

Float Equipment: Cement nose guide shoe thread locked. Self fill insert float valve run in top of first joint. Thread lock connection between first and second joint run.

5. **Intermediate Hole Program:**

Bit: Drill an 8 ¾" hole to 4181' using TCI, IADC Class 447 bit. WOB: 35-45K. RPM: 60 - 75. Reduce RPM to 55 - 65 through Ojo Alamo.

Mud: Use a fresh water base LSND mud with the following properties:

Interval (ft)	Weight (ppg)	Ph	Vis(sec/qt)	Water Loss
600 - 3500	8.6 - 8.8	9.0-9.5	28 - 35	10 - 12
3500 - 4181	8.9 - 9.2	9.0-9.5	35 - 50	8 - 10

Fresh water will be used for initial mud up. Produced water will be used for subsequent additions for dilution and building volume. Sufficient materials will be on location at all times to maintain mud properties and to control any lost circulation problem or unforeseen abnormal pressures. The mud volume in the rig pits will be visually monitored and recorded on a routine basis.

Note: Raise **viscosity** to 55 - 60 for logging. Thin to 40 - 45 viscosity to run casing.

pH is to be maintained with lime or caustic soda at the recommended levels to assure drill pipe corrosion protection.

Drispac will be used for control of fluid loss.

Hole will be drilled to top of Fruitland using polymer and drispac additions to water. Mud up before drilling into Fruitland.

Lost Circulation is expected and can occur in the Fruitland Coal and Pictured Cliffs formation. Mud weights should be controlled as low as possible with solids control equipment then as low as practical with water dilution.

Pressure Control: A 2M psi BOP well control system will be utilized. BOP's and choke manifold will be installed and pressure tested to a minimum of 600 psig before drilling out from under surface casing. Mechanical operation of pipe rams will be checked daily and blind rams will be checked on each trip out of hole. 7" rams will be installed before running intermediate casing. A full opening internal blowout preventor or drill pipe safety valve will be on the drill floor at all times and will be capable of fitting all connections.

Logging Program: No logs will be run in intermediate hole.

5. Intermediate Hole Program: - continued

Casing and Cementing Program: Run 7" 20# J-55 production casing from surface to Intermediate TD and cement in two stages with a mechanical DV tool installed @ 2090'±. **Stage 1:** (4181-2090') Cement with 165 sacks (349.8 cf) of Class 65/35 Class B Poz with 5 pps Gilsonite and 0.25 pps celloflake mixed at 12.1 PPG to yield 2.12 cf/sk. Tail in with 100 sacks (126.0 cf) of Class B with 2% $CaCl_2$, 0.25 pps celloflake and 5 pps gilsonite mixed at 15.2 PPG to yield 1.26 cf/sk. **Stage 2:** (2090 - surface); Cement with 195 sacks (413.4 cf) of 65/35 Class B Poz with 5 pps Gilsonite and 0.25 pps celloflake mixed at 12.1 PPG to yield 2.12 cf/sk. Tail in with 50 sacks (63.0 cf) of Class B with 2% $CaCl_2$, 0.25 pps celloflake and 5 pps gilsonite mixed at 15.2 PPG to yield 1.26 cf/sk.

Circulate and WOC between stages for four hours.

Slurry volumes assume a 50% excess over gauge hole volume. Minimum clearance between couplings and hole is 0.5470". Safety factors utilized in the design of this casing string were: burst = 1.1; collapse = 1.125; and tension = 1.8.

WOC 12 HOURS. Pressure test intermediate casing and BOPE to 1500 psi for 15 minutes.

Centralizers: 10 - 7" X 8¾" bowspring centralizers will be run across all prospective pays and 5 - 7" X 8¾" turbolizers will be spaced such that one (1)is just below the Basal Fruitland Coal, two (2)across base of Ojo Alamo, and two (2) across base of Nacimiento.

Float Equipment: Cement nose float shoe, 1 joint 7" casing, float collar and one mechanical DV tool. Run two cement baskets below DV tool.

6. Production Hole Program:

Bits: Drill a 6¼" hole to 6281' feet using air hammer. WOB: 5 - 25K. RPM: to be determined by drilling conditions. If hole gets wet use TCI, IADC class 637 to finish hole.

Mud: Air from Intermediate casing shoe to TD. If hole gets wet use a fresh water based low solids non dispersed system with the following properties: **Note**: Pull into intermediate casing to mud up.

Interval (ft)	Weight (ppg)	pH	Vis(sec/qt)	Water Loss
? - TD	8.6 - 9.0	9.0-9.5	28 - 40	8 - 10 cc

6. **Production Hole Program:** - continued

Pressure Control: A 2M psi BOP well control system will be utilized. BOP's and choke manifold will be installed and pressure tested to a minimum of 1500 psig before drilling out from under intermediate casing. Mechanical operation of pipe rams will be checked daily and blind rams will be checked on each trip out of hole. 4 1/2" rams will be installed before running production casing.

A full opening internal blowout preventor or drill pipe safety valve will be on the drill floor at all times and will be capable of fitting all connections.

Logging Program: Induction and Compensated density/Epithermal neutron logs from TD to intermediate casing shoe. Pull gamma ray to surface for correlation purposes. A temperature log may be run if natural flows are encountered

Casing and Cementing Program: Run 4 ½" 10.5# J-55 production liner on sufficient amount of drill pipe to place liner hanger a minimum of 120' into intermediate casing. Cement in a single stage with 130 sacks (261.3 cf) of 65/35 Class H Poz with 5 pps gilsonite and 0.25 pps celloflake mixed at 12.3 ppg to yield 2.01 cf/sk. Tail in with 100 sacks (133.0 cf) of 50/50 Class H Poz with 2% gel, 5 pps gilsonite, 0.25 pps celloflake, 0.4% FLA and 0.2% friction reducer mixed at 13.7 PPG to yield 1.33 cf/sk.

Slurry volumes assume a 70% excess over gauge hole volume to bring cement back into the intermediate casing. Cement volume is subject to change after review of open hole caliper log to caliper volume + 30%. Minimum clearance between couplings and hole is 0.625". Safety factors utilized in the design of this casing string were: burst = 1.1; collapse = 1.125; and tension = 1.8.

Centralizers: 9 - 4½" X 6⅛" rigid centralizers will be spaced across all prospective pay zones in the Mesa Verde.

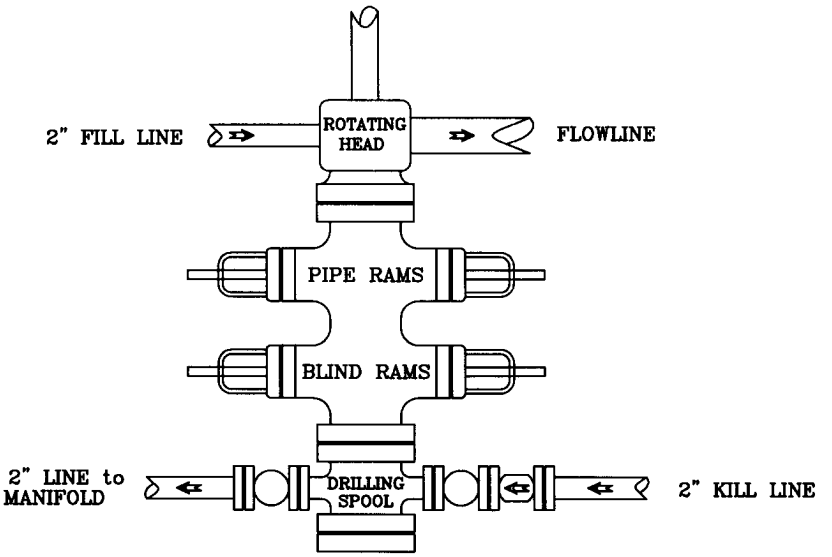
Float Equipment: Float shoe, 1 joint 4 1/2" 10.5 # casing, and latch collar. 4 ½" X 7" TIW liner hanger will be run between casing and drill pipe.

7. **Auxiliary Equipment:**

An upper kelly cock will be utilized. The handle will be available on rig floor at all times

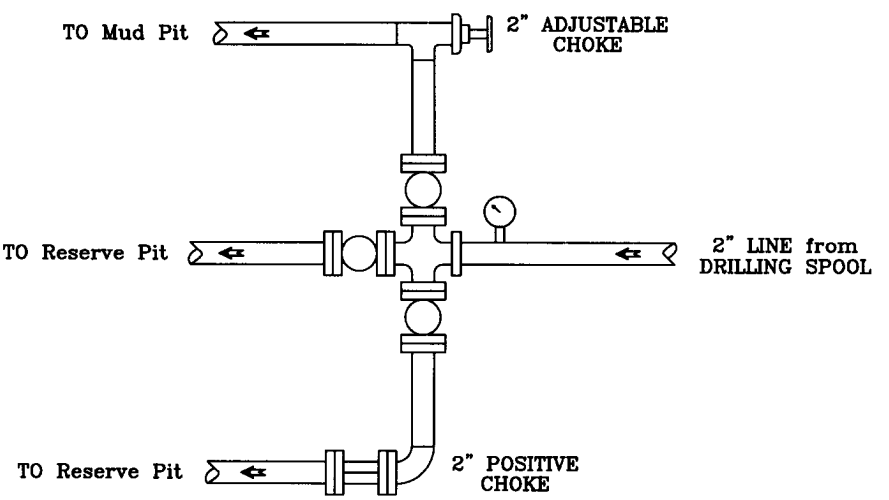
PRESSURE CONTROL

Wellhead Assembly



Preventer and Spools are to have a
6" Bore or larger and a 2000 PSI
or higher Pressure Rating

Choke Manifold



McElvain Oil & Gas Properties, Inc.

Bear Com 29 No. 2

1145' FNL – 805' FEL

Section 29, T26N, R2W, NMPM

Rio Arriba County, New Mexico

McELVAIN OIL & GAS PROPERTIES BEAR COM 29 #2
1145' FNL, 805' FEL, SECTION 29, T26N, R2W, NMPM
RIO ARRIBA COUNTY, NM, GROUND ELEVATION: 7394'

LATITUDE: 36°27'36"
LONGITUDE: 107°04'02"